

PATENT COOPERATION TREATY

REC'D 30 SEP 2005

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From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:  
PAUL T. PARKER  
PERKINS COIE LLP  
P.O. BOX 1247  
SEATTLE, WA 98111-1247

**PCT**

NOTIFICATION OF TRANSMITTAL OF  
INTERNATIONAL PRELIMINARY  
REPORT ON PATENTABILITY  
(Chapter II of the Patent Cooperation Treaty)

(PCT Rule 71.1)

Date of mailing  
(day/month/year)

**28 SEP 2005**

Applicant's or agent's file reference

**IMPORTANT NOTIFICATION**

334498008WO

International application No.	International filing date (day/month/year)	Priority date (day/month/year)
PCT/US04/32851	05 October 2004 (05.10.2004)	09 October 2003 (09.10.2003)

Applicant

CARGILL, INCORPORATED

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary report on patentability and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices)(Article 39(1))(see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the *PCT Applicant's Guide*.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed invention is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the IPEA/ US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer C. SAYALA Telephone No. 571-272-1700 <i>Jean Proctor Paralegal Specialist</i>
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## PATENT COOPERATION TREATY

## PCT

REC'D 30 SEP 2005

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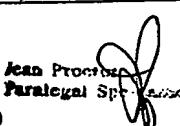
PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 334498008WO	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/US04/32851	International filing date (day/month/year) 05 October 2004 (05.10.2004)	Priority date (day/month/year) 09 October 2003 (09.10.2003)	
International Patent Classification (IPC) or national classification and IPC IPC(7): A23K 1/14 and US Cl.: 426/630, 634, 635, 807			
Applicant CARGILL, INCORPORATED			

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>3</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of <u>1</u> sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>																									
<p>4. This report contains indications relating to the following items:</p> <table> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. I</td> <td>Basis of the report</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>		<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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<input type="checkbox"/>	Box No. VIII	Certain observations on the international application																							

Date of submission of the demand 20 July 2005 (20.07.2005)	Date of completion of this report 05 September 2005 (05.09.2005)
Name and mailing address of the IPEA/ US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	<p>Authorized officer</p> <p>C. SAYALA</p> <p>Telephone No. 571-272-1700</p> 

**Box No. I Basis of the report**

1. With regard to the language, this report is based on:
  - the international application in the language in which it was filed.
  - a translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
    - international search (under Rules 12.3 and 23.1(b))
    - publication of the international application (under Rule 12.4(a))
    - international preliminary examination (under Rules 55.2(a) and/or 55.3(a))
  
2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):
  - the international application as originally filed/furnished
  - the description:  
pages 1-10 as originally filed/furnished  
pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
  - the claims:  
pages 11-15 as originally filed/furnished  
pages\* \_\_\_\_\_ as amended (together with any statement) under Article 19  
pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
  - the drawings:  
pages NONE as originally filed/furnished  
pages\* NONE received by this Authority on \_\_\_\_\_  
pages\* NONE received by this Authority on \_\_\_\_\_
  - a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
  
3.  The amendments have resulted in the cancellation of:
  - the description, pages \_\_\_\_\_
  - the claims, Nos. \_\_\_\_\_
  - the drawings, sheets/figs \_\_\_\_\_
  - the sequence listing (*specify*): \_\_\_\_\_
  - any table(s) related to the sequence listing (*specify*): \_\_\_\_\_
  
4.  This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
  - the description, pages \_\_\_\_\_
  - the claims, Nos. \_\_\_\_\_
  - the drawings, sheets/figs \_\_\_\_\_
  - the sequence listing (*specify*): \_\_\_\_\_
  - any table(s) related to the sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

Form PCT/IPEA/409 (Box No. I) (April 2005)

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
PCT/US04/32851

**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

## 1. Statement

Novelty (N)	Claims 1-4, 6	YES
	Claims 5, 7-32	NO
Inventive Step (IS)	Claims NONE	YES
	Claims 1-32	NO
Industrial Applicability (IA)	Claims 1-32	YES
	Claims NONE	NO

## 2. Citations and Explanations (Rule 70.7)

Claims 1-4 and 6 lack novelty under PCT Article 33(2) as being anticipated by Porter et al. or Jones et al. or EP 0925723. Either one of the patents teaches animal feeds with oilseed based animal. The product contains about 55% wt protein. Applicant has chosen to claim the product in terms of its characteristics, and because the Office is not equipped to manufacture and compare prior art products, the burden is being shifted to applicant to show that the product is different by presenting evidence that establishes that the reference product has a different aglycone content than the one claimed.

Claims 1-32 lack an inventive step under PCT Article 33(3) as being obvious over JP 81039176 and Itoh et al. in view of Takebe et al., Sekiya, Gazave and Bickoff et al. and further in view of Kalmbach and Harris et al.

Jp '176 and Itoh et al. teach the use of soybean germ into animal feed. It is known in the art that the soybean germ contains 2% isoflavone, which is ten times what the endosperm contains. The patents do not teach combining this with soybean meal.

The patents Takebe et al., Sekiya, Gazave and Bickoff et al. all teach the use of isoflavones being beneficial in animal feeds. Each patent describes the benefits. In '754, see claim 1. In '906, see lines 55-60 at col. 1 and col. 2, lines 50-55. In '116, see col. 1. In '632 see lines 15-30 at col. 1.

Kalmbach and Harris et al. are applied here to show conventional feeds and their contents, used for animals, that include soybean meal. See cols. 2 and 3 in '038 and, col. 5, in '803, respectively. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine soybean germ with the conventional ingredients in animal feeds, for the benefits shown for isoflavones in soybean germ, particularly when Takebe et al., Sekiya, Gazave and Bickoff et al. all teach the benefits of isoflavones in animal feeds. To optimize or determine amounts of aglycone and isoflavone concentrations would have been within routine skill given the state of the art.

Claims 1-32 meet the criteria set out in PCT Article 33(4), and thus meet industrial applicability because the subject matter claimed can be made or used in industry.